

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method, comprising:
sending power to at least one radio frequency ~~(RF)~~-identification (RFID) transponder (tag), including:
sending power P_j for a first time interval t_j to the at least one tag at a first frequency f_j chosen from a list of N frequencies $f_1, f_j, f_{j+1}, \dots, f_N$, and
sending power P_{j+1} for a time interval t_{j+1} to the at least one tag at a second frequency f_{j+1} chosen from the list of N frequencies, wherein t_j and t_{j+1} are time intervals of different lengths and wherein the corresponding frequencies f_j and f_{j+1} are different frequencies in a same frequency band, and wherein a time between sending power P_j and P_{j+1} is less than a time t_0 in which the at least one tag loses a particular tag function if no power is sent to the tag.
2. (Previously Presented) The method of claim 1, wherein t_{j+1} is chosen to be long enough that all tags in operative communication with the base station at frequency f_{j+1} have identified themselves.
3. (Previously Presented) The method of claim 1, wherein the sending of power P_{j+1} is stopped after the time interval t_{j+1} when no further tags identify themselves.
4. (Previously Presented) The method of claim 1, wherein P_j and P_{j+1} are different powers.

5. (Previously Presented) The method claim 4, wherein P_{j+1} is reduced from P_j when t_j is too short a time for all tags in operative communication with the base station to have identified themselves.

6. (Original) The method of claim 1, wherein $|t_{j+1} - t_j| > 0.05 (t_j + t_{j+1})$.

7. (Original) The method of claim 6, wherein $|t_{j+1} - t_j| > 0.1 (t_j + t_{j+1})$.

8. (Original) The method of claim 7, wherein $|t_{j+1} - t_j| > .3 (t_j + t_{j+1})$.

9. (Original) The method of claim 1, wherein P_j is a function of time.

10. (Original) The method of claim 9, wherein P_j is a monotonically increasing function of time.

11. (Previously Presented) The method of claim 10, wherein P_j is increased when no further tags identify themselves.

12. (Currently Amended) A method of frequency hopping, comprising:
sending a first power at a first frequency to a plurality of tags during a first time interval having a first length;
receiving responses from the plurality of tags; and
sending a second power at a second frequency to the plurality of tags if a time between received responses exceeds a response time, the second power being sent during a second time interval having a second length that is different than the first length of the first time interval, the first frequency of the first power being different from the second frequency of the second power, the first frequency and the second frequency being in a same frequency band.

13. (Previously Presented) The method of claim 12, wherein the response time is less than a flag reset time t_0 of a tag of the plurality of tags.

14. (Previously Presented) The method of claim 12, wherein the response time is less than a tag power down time.

15. (Previously Presented) The method of claim 12, wherein the response time is less than 20 milliseconds.

16. (Previously Presented) The method of claim 12, further comprising sending the second power at the second frequency to the plurality of tags during the second time interval if no response is received from the plurality of tags for the response time.

17. (Previously Presented) The method of claim 12, further comprising sending the second power at the second frequency to the plurality of tags when a total time of sending the first power at the first frequency exceeds a protocol time limit t_{\max} .

18. (Currently Amended) A RFID system, comprising:
at least a first antenna; and
a base station communicatively coupled to at least the first antenna and operable to:

send a first power at a first frequency to a plurality of tags during a first time interval having a first length,

receive responses from the plurality of tags, and

send a second power at a second frequency to the plurality of tags if a time between received responses exceeds a response time, the second power being sent during a second time interval having a second length that is different than the first length of the first time interval, the first frequency of the first power being

different from the second frequency of the second power, the first frequency and the second frequency being in a same frequency band.

19. (Currently Amended) A RFID system, comprising:

a plurality of tags; and

a base station operable to send a first power at a first frequency to the plurality of tags during a first time interval having a first length, receive responses from the plurality of tags, and send a second power at a second frequency to the plurality of tags if a time between received responses exceeds a response time, the base station operable to send the second power during a second time interval having a second length that is different than the first length of the first time interval, the first frequency of the first power being different from the second frequency of the second power, the first frequency and the second frequency being in a same frequency band.

20. (Previously Presented) The system of claim 19, wherein the first length of the first time interval is greater than the second length of the second time interval.

21. (Currently Amended) A RFID system, comprising:

means for sending a first power at a first frequency to a plurality of tags during a first time interval having a first length;

means for receiving responses from the plurality of tags; and

means for sending a second power at a second frequency to the plurality of tags if a time between received responses exceeds a response time, the second power being sent during a second time interval having a second length that is different than the first length of the first time interval, the first frequency of the first power being different from the second frequency of the second power, the first frequency and the second frequency being in a same frequency band.

22. (Previously Presented) The system of claim 21 wherein the first length of the first time interval is greater than the second length of the second time interval.

23. (Previously Presented) The method of claim 1 wherein sending the second power includes sending the second power after sending the first power.

24. (Previously Presented) The method of claim 12 wherein sending the second power includes sending the second power after sending the first power.

25. (Previously Presented) The system of claim 18 wherein the second power is sent after the first power.

26. (Previously Presented) The system of claim 19 wherein the base station is operable to send the second power after the first power.

27. (Previously Presented) The system of claim 21 wherein the means for sending the second power sends the second power after the means for sending the first power sends the first power.